

PUBLIC JUSTICE

RIGHTING WRONGS

February 14, 2013

President and Chief Executive Officer
AES Corp.
4300 Wilson Boulevard
Arlington, VA 22203

President and Chief Executive Officer
AES Puerto Rico, Inc.,
Carretera # 3, KM 142.0
Bo. Pte Jobos
Guayama, Puerto Rico 00784

AES Puerto Rico, L.P.,
Manuel Matta, Director
Carretera #3, KM 142.0
Bo. Pte Jobos
Guayama, Puerto Rico 00784

RE: Addendum to Notice of Intent to Sue AES Corporation (and local affiliates)
for Violations of the Resource Conservation and Recovery Act Involving
Uncontrolled Disposal of Coal Ash Waste Generated at the AES Power
Plant in Guayama, Puerto Rico

Dear Sirs:

This addendum to the initial notice letter dated September 26, 2012 on behalf of the Comité Diálogo Ambiental, Inc. ("Citizens") provides notice of additional claims. The initial letter provided you with notice of Citizens intent to file suit against AES Corp. and relevant subsidiaries ("AES") for ongoing violations of the Resource Conservation and Recovery Act ("RCRA") resulting from disposal of waste coal ash, known as Agremax (the "Waste"), from the AES coal fired power plant in Guayama, Puerto Rico (the "Plant"). The Waste is comprised of 80% fly ash and 20% bottom ash. We have received new information about the potential for harmful substances, including toxic heavy metals, to leach from the Waste and contaminate the environment, including groundwater that is the only source of drinking water for a substantial number of the residents of the Guayama area. We have also gathered new information through further observation. We are therefore now sending this addendum to supplement the notice already given.¹

¹ Inclusion of claims in this letter is not an admission that they were not already adequately noticed. We reserve the right to file suit prior to 90 days after this letter on the claims that we previously noticed.

National Headquarters
1825 K Street NW, Suite 200
Washington, DC 20006
ph: 202-797-8600
fax: 202-232-7203

West Coast Office
555 12th Street, Suite 1230
Oakland, CA 94607
ph: 510-622-8150
fax: 510-622-8155

www.publicjustice.net

A newly released EPA study using the new Leaching Environmental Assessment Framework (“LEAF”) shows that aluminum, arsenic, boron, cadmium, chloride, chromium, fluoride, lead, lithium, molybdenum, selenium, sulfate, and thallium can leach from the Waste at high levels and then contaminate the local environment around the sites at which coal ash has been disposed.² The LEAF testing and assessment approach has been developed by EPA to provide a comprehensive testing regime through multi-point leach testing over a range of test conditions considered suitable for complex environmental evaluations. The LEAF testing results are intended to provide a source term for subsequent constituent transport and fate evaluation. The results of the LEAF tests are a series of “indicator ratios” under different conditions of pH and solid to liquid ratios. The indicator ratio is the concentration in the leachate divided by the lowest concentration in drinking water standards, site cleanup standards or environmental standards. Therefore, an indicator ratio of 1 or less would denote no concern. In contrast, a high indicator value indicates a high potential for contamination of the environment in a manner that could harm human health or organisms in the environment.

The pH extraction procedure uses 10 different pH values varying from pH 2 to pH 13. In general, a waste will gradually tend toward neutral pH as it ages. The liquid solid (“L/S”) partitioning procedure uses nine different samples taken as liquid leaches substances from the Waste in a column. This essentially gives an indication of how the leaching will vary over time. In order to put the results into perspective, scientists divided them by the lower of US EPA Region 9 regional screening levels (“RSLs”) for tap water or US national drinking water regulations (“NDWRs”). Table 4 of the LEAF report provides the reference concentration used (the lower of the RSL or the NDWR), and the maximum concentration found in the variable pH test and the variable L/S test. That table shows the following results.

The high concentrations of chemicals in the leachate indicate that placing the ash at the sites shown on the maps attached to the initial notice letter is likely to cause harmful environmental contamination. The indicator ratios in the LEAF report show that drinking water is likely to become contaminated by chemicals that can harm human health. In the LEAF test, the Indicator Ratio for pH-dependent leaching of arsenic in Waste is 1,100. The Indicator Ratio for the L/S-dependent leaching of arsenic in Waste is 950. The same ratios for boron are 1,700 and 390 respectively. For chloride the ratios are 490 and 7,600 respectively. For chromium the ratios are 470 and 9,000 respectively. For fluoride the ratios are 65 and 150 respectively. For lithium the ratios are 36 and 120 respectively. For molybdenum the ratios are 13 and 160 respectively. For nitrate the ratios are 4 and 56 respectively. For selenium the ratios are 10 and 73 respectively. For sulfate the ratios are 11 and 84 respectively. For thallium the ratios are 31 and 14 respectively. Thus, the LEAF tests demonstrate that harmful chemicals, including heavy metals, are likely to leach from Waste into groundwater and other water bodies at levels that far exceed current health-based standards for drinking water.

In addition, comparing the LEAF results to environmental screening criteria shows that leachate from the Waste is likely to harm the environment. For example, the maximum selenium concentration in the L/S-dependent test was 3.6 mg/L. This is approximately 720 times the

² A.C. Garrabrants, D.S. Kosson, R. DeLapp and Peter Kariher, Leaching Behavior of “AGREMAX” Collected from a Coal-Fired Power Plant in Puerto Rico, Epa-600/r-12/XXX (November 2012) (“LEAF Report”) (available upon request)

National Recommended Water Quality Criterion of 5 µg/L for chronic selenium concentrations.³ Similarly, chloride levels exceed the same criteria by a factor of 13 for the acute standard and a factor of 50 for the chronic standard. The lead levels exceed the same criteria by a factor of 9 for the acute standard and a factor of 250 for the chronic standard. The chronic criteria for aluminum and cadmium are also exceeded by factors of 7.5 and 25 respectively. For sulfate, the maximum sulfate concentration in L/S-dependent test was 21,000 mg/L. In Appalachian streams West Virginia DEP considers sulfate to be a “definite stressor” when it exceeds 417 mg/l and a “likely stressor” when it exceeds 290 mg/l. Thus, the sulfate levels in leachate from the Waste could have a sulfate concentration that is fifty times the level that causes definite stress in Appalachian Streams. Finally, a boron concentration of 1 to 2 mg/L is toxic to plants.⁴ The maximum concentration measured in the LEAF Report is 12 mg/L, 6 to 12 times the harmful level. Thus, the LEAF tests demonstrate that harmful chemicals, including heavy metals, are likely to leach from Waste into the environment at levels that far exceed levels at which environmental harm is likely.

The potential for leaching of these toxic and harmful substances from the Waste into the environment may therefore present an imminent and substantial endangerment to public health and the environment violating Section 7002(a)(1)(B) of RCRA. 42 U.S.C. § 6972 (a)(1)(B). AES has therefore violated, is currently violating, and will continue to violate RCRA by failing to isolate the Waste at the sites shown in the initial notice letter sent on September 26, 2012 from the environment. In addition, AES has violated RCRA by disposing of the Waste upon vegetated areas, destroying those habitats. To date, the defendants have not commenced action to redress these RCRA violations. Unless Defendants take such actions upon the newly noticed claims in this letter prior to the expiration of the 90 day notice period that commences with this letter, Citizens intend to file suit to enjoin and abate these violations.

If you have any questions regarding the allegations in this notice or believe any of the foregoing information may be in error, please contact Richard Webster at the number listed below. In the absence of any questions, we would also welcome an opportunity to discuss a resolution of this matter prior to the initiation of litigation if you are prepared to remedy the violations noticed above within a reasonable time.

Sincerely,

/s

Richard Webster, Esq.
Public Justice
1825 K Street, NW Suite 200
Washington, D.C. 20006
rwebster@publicjustice.net
(202) 797-8600

Counsel for Citizens

³ <http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>

⁴ <http://www.fao.org/docrep/003/T0234E/T0234E05.htm>

Ruth Santiago, Esq.
P.O. Box 518,
Salinas, Puerto Rico 00751

Local Counsel for Citizens

cc:

Corporation Service Co.
2711 Centerville Road
Suite 400
Wilmington, DE 19808
Registered Agent for AES Corporation

Via Certified Mail, Return Receipt Requested

Allan B. Dyer
P.O. Box 1890
Guayama, Puerto Rico 00785-1890
Registered Agent for AES Puerto Rico, Inc.

Via Certified Mail, Return Receipt Requested

Lisa Jackson or replacement
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, DC 20460

Via Certified Mail, Return Receipt Requested

Judith Enck
Regional Administrator
U.S. Environmental Protection Agency Region 2
290 Broadway
New York, NY 10007-1866

Via Certified Mail, Return Receipt Requested

Eric Holder, U.S. Attorney General
U.S. Department of Justice
950 Pennsylvania Avenue N.W.
Washington, DC 20530-0001

Via Certified Mail, Return Receipt Requested

Luis Sanchez Betances
Secretary
Puerto Rico Department of Justice
P.O. Box 9020-0192
San Juan, PR 00902-0192

Via Certified Mail, Return Receipt Requested

Laura Velez
Executive Director
Puerto Rico Environmental Quality Board
P.O. Box 11488
San Juan, PR 00910

Via Certified Mail, Return Receipt Requested